

(NASA-CR-125716) COMPUTER-GENERATED AERIAL
SCENE OF THE DESCARTES LANDING AREA VIEWED
FROM THE WEST (Bellcomm, Inc.) 3 p

N79-73363

Unclas
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Bellcomm

955 L'Enfant Plaza North, S.W.
Washington, D. C. 20024

B71 12021

date: December 29, 1971
to: Distribution
from: K. E. Martersteck, G. S. Taylor
subject: Computer-Generated Aerial Scene of the
Descartes Landing Area Viewed from the
West -- case 310

MEMORANDUM FOR FILE

In Reference 1, a computer-generated view of the Descartes landing area representing the region visible from the LM just after high-gate was presented. In order to more fully appreciate the topographic features in the Apollo 16 landing region, an aerial view was generated from the vantage point of an observer 3077 meters (~10,000 ft) above the point 8°57'S, 15°9'E (~11 km west of the landing site) looking to the east.

The computer-generated representation of the lunar surface is produced by processing digitized elevation data obtained from the U. S. Army TOPOCOM using both 1:25,000 and 1:100,000 scale maps of the Descartes region. The 1:25,000 scale map is roughly centered on the landing area and inset into the 1:100,000 scale map (the interface between the two maps occasionally appears as a discontinuity or fault line in the scene). The data are scanned to determine which points are visible to the observer, plotted in perspective and connected by lines of constant latitude and longitude. In the foreground the lunar surface is depicted by a grid 50 by 50 meters. The background points are connected by a grid 100 by 100 meters to reduce the darkening as the lines become close together. Note that the relative brightness of surface features is due to variations in line density and does not correspond to the actual albedo of the scene. No shadows have been included on the scene.

2013-KEM
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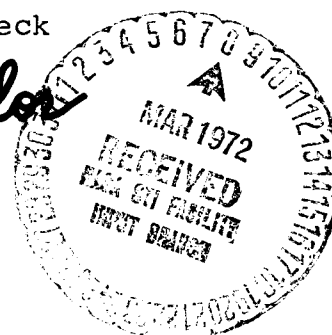
Attachment

K. E. Martersteck

K. E. Martersteck

G. S. Taylor

G. S. Taylor

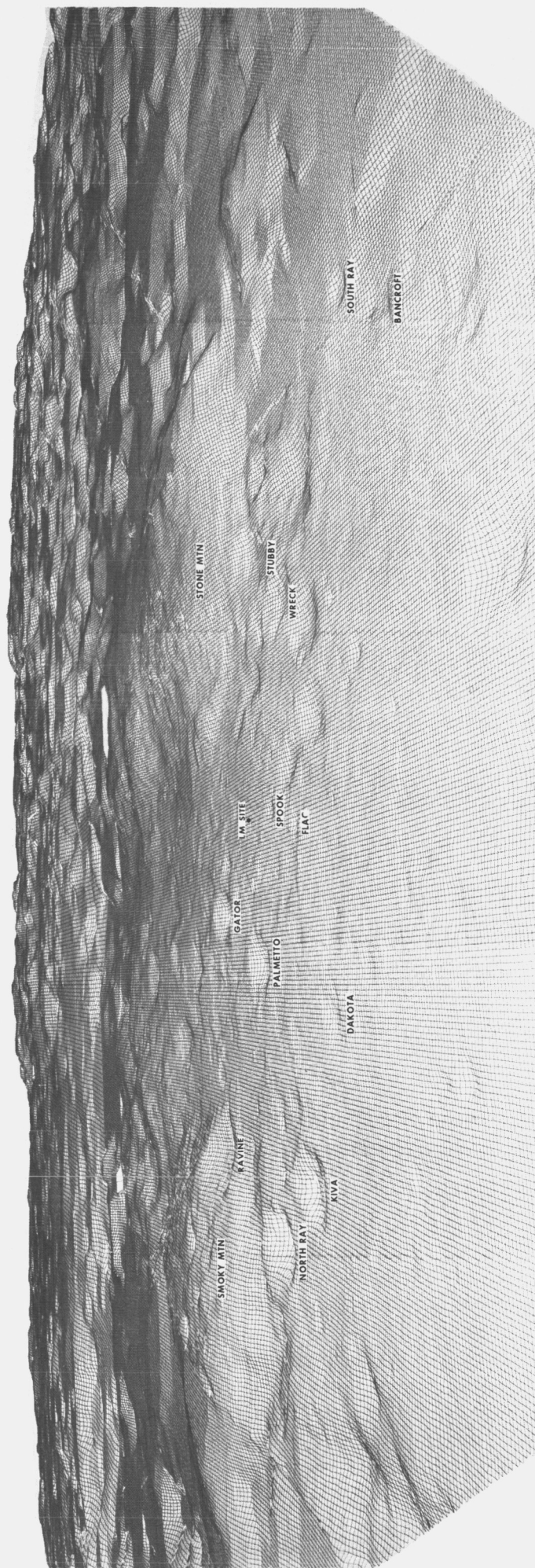




REFERENCES

1. "Computer-Generated View of the Descartes Landing Area from the LM just after Hi-Gate," Bellcomm Memorandum for File B71 11021, R. A. Bass, G. S. Taylor, S. C. Wynn, November 18, 1971.

VIEW OF DESCARTES LANDING AREA LOOKING EAST
(FROM 3077 METERS ALTITUDE, 11 KM WEST OF LANDING SITE)





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